AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/559,381

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

Attorney Docket No.: Q91866

application:

**LISTING OF CLAIMS:** 

1. (currently amended): A valve seal intended for a fluid product aerosol dispenser,

wherein the said seal includes an elastomer based upon ethylene propylene (EP) and/or ethylene

propylene diene monomer (EPDM), and a mineral filler based upon quartz (SiO<sub>2</sub>) and Kaolinite

 $(Al_4[(0H)_8Si_4O_{10}])$ "; and

wherein the mineral filler does not comprise feldspar;

wherein the valve seal is made of a one-piece integral structure; and

wherein the valve seal is does not include a rigid insert.

2. (original): A seal according to claim 1, in which the mineralogical composition of the

mineral filler includes between 65 % and 95 %, preferably 80 %, of quartz, and between 5 % and

35 %, preferably about 20 %, of Kaolinite.

3. (previously presented): A seal according to claim 1, in which the chemical

composition of the mineral filler includes between 3% and 15%, preferably about 8 %, of Al<sub>2</sub>0<sub>3</sub>.

and between 75 % and 95 %, preferably about 87 %, of SiO<sub>2</sub>.

4. (previously presented): A seal according to claim 1, in which the mineral filler has a

pH greater than 6, preferably between about 7 and 8.

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5. (previously presented): A seal according to claim 1, in which the mineral filler has an

average particle size of between 1.5 and 4 microns, preferably about 2.2 microns.

6. (previously presented): A seal according to claim 1, in which the said seal, before its

assembly into a fluid product aerosol dispenser, is subjected to a surface chlorination treatment.

7. (original): A seal according to claim 6, in which the said seal is immersed in a solution

containing water, hydrochloric acid and bleach.

8. (previously presented): A measuring-out valve for a fluid product aerosol dispenser,

characterised in that it includes at least a valve seal according to claim 1.

9. (previously presented): A dispenser for dispensing a fluid product, that includes a

reservoir containing a fluid product and a propellant gas, and a valve, preferably a measuring-out

valve, mounted on the said reservoir, characterised in that the said valve includes at least a valve

seal according to claim 1.

10. (previously presented): A dispenser according to claim 9, in which the said valve

includes a valve element sliding in a valve body with the interposition of the valve seal.

11. (previously presented): A dispenser according to claim 9, in which the said

propellant gas includes HFC-134a gas and/or HFC-227 gas.

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12. (previously presented): A dispenser according to claim 9, in which the reservoir also

contains alcohol, and ethanol in particular.

13. (previously presented): A manufacturing process for a valve seal intended for a fluid

product aerosol dispenser, wherein the process includes the following stages:

- creation of a <u>one-piece integral structure</u> seal that includes an elastomer based upon

ethylene propylene (EP) and/or ethylene propylene diene monomer (EPDM), and a mineral filler

based upon quartz (SiO<sub>2</sub>) and kaolinite (Al<sub>4</sub>[(OH)<sub>8</sub>Si<sub>4</sub>O<sub>10</sub>)] and wherein the mineral filler is

created without feldspar; and

- submission of this seal to a surface chlorination treatment;

wherein the valve seal is does not include a rigid insert.

14. (original): A process according to claim 13, in which the said surface chlorination

treatment includes immersing the seal in a solution containing water, hydrochloric acid and

bleach.

15. (previously presented): A valve seal for an aerosol dispenser, wherein the valve seal

comprises:

an elastomer based upon ethylene propylene (EP) and/or ethylene propylene diene

monomer (EPDM); and

a mineral filler based upon quartz (SiO<sub>2</sub>) and Kaolinite (Al<sub>4</sub>[(0H)<sub>8</sub>Si<sub>4</sub>O<sub>10</sub>]); and

wherein the mineral filler does not comprise feldspar;

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wherein the valve seal is made of a one-piece integral structure; and wherein the valve seal is does not include a rigid insert.

16. (previously presented): An aerosol dispenser for dispensing a fluid product, the aerosol dispenser comprising:

- a reservoir containing a fluid product and a propellant gas;
- a valve mounted on the said reservoir;

wherein said valve comprises at least one valve seal according to claim 15.

17-18. (canceled).